REMARKS

Claim 38 is the claim presently pending in the application.

Claim 38 stands provisionally rejected on the ground of nonstatutory double patenting over claims 1-7 and 34-36 of copending Application No. 12/062,211. However, Applicants respectfully disagree and submits that the subject matter of claim 38 of the present application includes an emulation processor, where claims 1-7 and 34-36 of copending Application No. 12/062,211 have claims directed to an emulation device. Specifically, claim 38 is not taught or suggest by claims 1-7 and 34-36 of copending Application No. 12/062,211.

With respect to the prior art, claim 38 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Dai (U.S. Patent Publication No. 2005/0049848 A1) in view of Autrey et al. (U.S. Patent No. 5,774,695).

This rejection is respectfully traversed in the following discussion.

I.   THE CLAIMED INVENTION

An exemplary aspect of the claimed invention (e.g., as recited in claim 38) is directed to a computer system, including a local area network (LAN), a plurality of computers without on-board user interface controllers, each of the computers including at least one central processing unit (CPU) and a LAN interface, the LAN interface being coupled to communicate over the LAN, a console including a user input device and a user output device, the console being coupled to communicate over the LAN such that the console conveys an input received via the user input device over the LAN to each of the computers and to receive an output generated by each of the computers over the LAN for display using the user output device, and an input/output (I/O) device, coupled to the LAN.

The plurality of computers and the console are arranged to communicate over the LAN by transmitting Layer 2 data frames. The plurality of computers and the console are arranged to convey the input and the output by tunneling over Layer 2 on the LAN. The plurality of computers and the console are arranged to encapsulate the input and output in Internet Protocol (IP) packets for transmission over the LAN. The plurality of computers and the console are arranged to encapsulate the input and output using an application-layer protocol. The plurality of computers are arranged to transmit I/O commands over the LAN to the I/O device and include on-board I/O device controllers. Each of the computers further includes an emulation processor, the emulation processor coupled to trap the I/O commands from the at least one CPU while emulating the I/O device, and to encapsulate the I/O commands in data frames for transmission over the LAN to the I/O device such that the I/O device is caused to fulfill the commands. The emulation processor is arranged to encapsulate the I/O commands in Ethernet frames. The emulation processor is arranged to encapsulate the I/O commands in Internet Protocol (IP) packets. The emulation processor is arranged to encapsulate the I/O commands using an application-layer protocol.

A number of new standards have recently been promulgated to permit accessing at least some I/O peripherals remotely, via packet networks. However, conventional computer systems are not oriented in such a way as to accommodate such a structure (Application at page 1, line 13 to page 2, line 10).

The claimed invention, on the other hand, is directed to a computer system, including a plurality of computers without on-board user interface controllers, each of the computers including at least one central processing unit (CPU) and a LAN interface, the LAN interface being coupled to communicate over the LAN (Application at page 8, line 13 to page 9, line 3). This exemplary

feature may provide a computer system having substantially increased board space and reduced

power requirements, complexity, cost, and management effort (Application at page 2, lines 25-29).

II. THE PRIOR ART REJECTION – The Alleged Dai and Autrey Combination

Dai discloses mechanisms that allow a physical storage device that has storage capability to

emulate one or more storage devices (Dai at Abstract). Autrey discloses a protocol interface

gateway connecting a telecommunication system emulator to a communications network (Autrey at

Abstract). The Examiner alleges that the combination of Dai and Autrey makes the claimed

invention obvious.

However, even assuming (arguendo) one of ordinary skill in the art would combine Dai and

Autrey, the resultant combination fails to teach or suggest each and every feature of the claimed

invention. Specifically, Dai and Autrey – either alone or assuming (arguendo) combination – clearly

fail to teach or suggest a computer system, "*comprising . . . a plurality of computers without on-*

board user interface controllers, each of the computers comprising at least one central processing

unit (CPU) and a LAN interface, the LAN interface being coupled to communicate over the LAN", as

recited, for example, in claim 38 (Application at page 8, line 13 to page 9, line 3). As previously

mentioned, this exemplary feature may provide a computer system having substantially increased

board space and reduced power requirements, complexity, cost, and management effort (Application

at page 2, lines 25-29).

The Examiner alleges that Dai teaches the exemplary feature of the claimed invention at

paragraphs [0029], [0031], and [0041] and Figures 1-3 (Office Action at page 7, point 15).

Applicants respectfully disagree and submit that the Examiner fails to interpret the claimed invention

as would one having ordinary skill in the art. The Examiner alleges that Dai teaches "the plurality of computers without on-board user interface controllers" of the claimed invention at paragraph [0031] and Figures 1-3. However, Dai completely fails to teach or suggest this feature. In stark contrast, the computers in Dai the Examiner refers to in Figure 1 have input components 114 and output components 116. In fact, the computers in Dai each seem to be individual computers having their own inputs and outputs. If the Examiner is stating that the computers in Figure 1 and Figure 2 teach the plurality of the computers of the claimed invention, he is obviously in error.

Further, the Examiner alleges that console of the claimed invention is somehow located in the Physical Storage Device of 220 of Dai, shown in Figure 2. One of ordinary skill in the art would clearly see that there is nothing within the Physical Storage Device 220 of Dai that teaches or suggests the console of the claimed invention. Regardless of the breadth of the interpretation of the console of the claimed invention, the plurality of computers and the console of the claimed invention are neither taught nor suggested by Dai.

In addition, the logical-over-physical storage in Dai is located at the "slave-end" of the master-slave relationship. Thus, Dai is clearly differentiated from the computer system of the claimed invention, where each of the computers further includes an emulation processor, the emulation processor coupled to trap the I/O commands from the at least one CPU while emulating the I/O device and to encapsulate the I/O commands in data frames for transmission over the LAN to the I/O device such that the I/O device is caused to fulfill the I/O commands.

Dai teaches that given existing SCSI and iSCSI interactions of a given SCSI device (physical) can be used to emulate several (logical) devices. However, using a device to emulate another device in a similar class is not related and is clearly differentiated from the claimed

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invention. <u>Indeed</u>, this is <u>clearly differentiated</u> from the computer system of the claimed invention, where <u>each of the computers further includes an emulation processor, the emulation processor coupled to trap the I/O commands from the at least one CPU while emulating the I/O device and to encapsulate the I/O commands in data frames for transmission over the LAN to the I/O device such that the I/O device is caused to fulfill the I/O commands</u>.

<u>Indeed</u>, Dai simply suggests how one type of network can be converted or emulated or how computer service are provided over a network, but <u>fails</u> to teach or suggest the exemplary feature of the claimed invention and the feature where a computer system has no on-board interfaces other than a network.

To make up for the deficiencies of Dai, the Examiner applies Autrey. The Examiner alleges that, at column 2, lines 13-25 and column 8, lines 3-24, "Autrey teaches the computers and the console are arranged to encapsulate the input and output using an application-layer protocol. (Office Action at page 9, point 29). <u>However</u>, Autrey <u>clearly fails</u> to teach or suggest the computer system of the claimed invention, including <u>a plurality of computers without on-board user interface controllers, each of the computers including at least one central processing unit (CPU) and a LAN interface, the LAN interface being coupled to communicate over the LAN</u>. Thus, Autrey <u>fails</u> to make up for the deficiencies of Dai with respect to the exemplary feature of the claimed invention.

Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

III.   FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicants submit that claim 38, the claim presently pending in the application, is patentably distinct over the prior art of record and is in condition for <u>allowance</u>. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, Applicants request the Examiner to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a <u>telephonic or personal interview</u>.

The undersigned authorizes the Commissioner to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

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